

**Commonwealth of Kentucky**  
**Natural Resources and Environmental Protection Cabinet**  
**Department for Environmental Protection**  
**Division for Air Quality**  
**803 Schenkel Lane**  
**Frankfort, Kentucky 40601**  
**(502) 573-3382**

**AIR QUALITY PERMIT**

**Permittee Name:** IMCO Recycling, Inc.  
**Mailing Address:** P.O. Box 1010, Morgantown, Kentucky 42261

is authorized to operate a secondary aluminum production facility

**Source Name:** IMCO Recycling, Inc.  
**Mailing Address:** P.O. Box 1010  
Morgantown, Kentucky 42261  
**Source Location:** at 1 IMCO Drive, Morgantown, Kentucky

**Permit Type:** Federally-Enforceable  
**Review Type:** Title V  
**Permit Number:** V-00-026  
**Log Number:** G176  
**Application**  
**Complete Date:** November 2, 1999  
**AFS #:** 21-031-00033  
**SIC Code:** 3341

**Region:** South Central  
**County:** Butler

**Issuance Date:**  
**Expiration Date:**

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**John E. Hornback, Director**  
**Division for Air Quality**

## TABLE OF CONTENTS

<u>SECTION</u>	<u>DATE OF ISSUANCE</u>	<u>PAGE</u>
SECTION A	PERMIT AUTHORIZATION	1
SECTION B	EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS	2
SECTION C	INSIGNIFICANT ACTIVITIES	21
SECTION D	SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS	22
SECTION E	SOURCE CONTROL EQUIPMENT OPERATING REQUIREMENTS	22
SECTION F	MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS	23
SECTION G	GENERAL CONDITIONS	26
SECTION H	ALTERNATE OPERATING SCENARIOS	32
SECTION I	COMPLIANCE SCHEDULE	32

## **SECTION A - PERMIT AUTHORIZATION**

Pursuant to a duly submitted application which was determined to be complete on November 2, 1999, the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto and shall become the final permit unless the U.S. EPA files an objection pursuant to Regulation 401 KAR 50:035, Section 21(3).

The permittee shall not construct, reconstruct, or modify any affected facilities without first having submitted a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in the Regulation 401 KAR 50:035, Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS****01 (E1, E2, E3)****Description:**

Six natural gas fired rotary aluminum furnaces with a melting rate of 5,500 lbs/hr, each, manufactured by IMCO. Each furnace has a rated capacity of 10 MMBTU/hr per furnace and is equipped with a Duralloy baghouse with lime injection and a 97% control efficiency for particulate matter.

Construction commenced: 1989, 1989, and 1990.

**APPLICABLE REGULATIONS:**

401 KAR 59:010, New Process Operations.

401 KAR 53:010, Ambient Air Quality Standards.

**1. Operating Limitations:**

None

**2. Emission Limitations:**

a. Particulate emissions shall not exceed the limitations calculated from the equation found in 401 KAR 59:010, Appendix A:  $E=3.59 \cdot P^{0.62}$ ,  
where E is the rate of emission in lb / hr and P is the process weight in tons / hr.

b. Visible emissions shall not equal or exceed 20% opacity. The opacity shall be determined by Reference Method 9 of Appendix A to 40 CFR 60, filed by reference in 401 KAR 59:010.

**3. Testing Requirements:**

Pursuant to Regulation 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in Regulation 401 KAR 50:015 shall be conducted as required by the Division.

**4. Specific Monitoring Requirements:**

IMCO Recycling, Inc. shall monitor the following as rolling 12-month totals [401 KAR 50:035, Section 7(1)(c)2]:

Aluminum scrap throughput to rotary aluminum melt furnaces;

Flux usage;

Opacity on a monthly basis.

Particulate emissions=(Monthly production rate)x(KYEIS emission factor)/(Hours of operation per month)x(100%-baghouse control efficiency). This emission factor may be replaced by a number obtained by the latest test approved by the Division.

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**5. Specific Recordkeeping Requirements:**

Retain records of the following [401 KAR 50:035, Section 7(1)(d)2]:

Aluminum scrap throughput in the rotary aluminum melt furnaces;

Flux usage;

Opacity;

Operating hours.

**6. Specific Reporting Requirements:**

Any exceedance of the opacity or particulate emission limits as stated in this permit shall be reported to the Division as promptly as possible per Section F (6). Following an exceedance the company shall continue to submit, for a period of at least 12 months, the monthly visible emission readings, the monthly production rates and the hours of operation within 30 days of the end of each calendar month.

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****02 (E-7)**

**Description:** Crucible Cleaning station (North American 4422-7-A) operates 20 hr per day, 7 days a week, and 52 weeks per year. Four natural gas heaters with a rated capacity of 1.04 MMBTU/hr, each. The crucible cleaning station is equipped with a baghouse filter with a control efficiency of 97%.

Construction commenced: 1991.

**APPLICABLE REGULATION:**

401 KAR 59:010, New process operations.

**1. Operating Limitations:**

None

**2. Emission Limitations:**

Particulate emissions shall not exceed the limitations calculated from the equation found in 401 KAR 59:010, Appendix A:  $E = 3.59 * P^{0.62}$ , where E is the rate of emission in lb / hr and P is the process weight in tons / hr.

Visible emissions shall not equal or exceed 20% opacity. The opacity shall be determined by Reference Method 9 of Appendix A to 40 CFR 60, filed by reference in 401 KAR 59:010.

**3. Testing Requirements:**

Pursuant to Regulation 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in Regulation 401 KAR 50:015 shall be conducted as required by the Division.

**4. Specific Monitoring Requirements:**

IMCO Recycling, Inc. shall monitor the following [401 KAR 50:035, Section 7(1)(c)2]:  
Throughput of aluminum to the crucible cleaning station;  
Visible emissions on a monthly basis using EPA Reference Method 9.

Particulate emissions=(Monthly production rate)x(KYEIS emission factor)/(Hours of operation per month)x(100%-baghouse control efficiency). This emission factor may be replaced by a number obtained by the latest test approved by the Division.

**5. Specific Recordkeeping Requirements:**

Retain records of the following [401 KAR 50:035, Section 7(1)(d)2]:  
Aluminum throughput in the crucible cleaning station;  
Operating hours.

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**6. Specific Reporting Requirements:**

Any exceedance of the opacity or particulate emission limits as stated in this permit shall be reported to the Division as promptly as possible per Section F (6). Following an exceedance the company shall continue to submit, for a period of at least 12 months, the monthly visible emission readings, the monthly production rates and the hours of operation within 30 days of the end of each calendar month.

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****03 (E-8)**

**Description:** One natural gas-fired reverberatory furnace, with a heat input capacity of 19 MM BTU/hr. The maximum annual output of molten aluminum is 54,750 tons per year. This emission point is equipped with a lime-injected Duralloy baghouse, which is 97% control efficiency for particulate matter.

Construction commenced: May 13, 1998

**APPLICABLE REGULATIONS:**

Regulation 401 KAR 59:010, New process operations.

**1. Operating Limitations:**

None

**2. Emission Limitations:**

Visible emissions shall not equal or exceed 20% opacity. The opacity shall be determined by Reference Method 9 of Appendix A to 40 CFR 60, filed by reference in 401 KAR 59:010.

Particulate emissions shall not exceed the limitations calculated from the equation found in 401 KAR 59:010, Appendix A.

$$E = 3.59 * P^{0.62}$$

where E is the rate of emission in lbs/ hr and P is the process weight in tons / hr.

**3. Testing Requirements:**

None

**4. Monitoring Requirements:**

Opacity readings shall be performed by a certified visible emissions observer at least once per month during furnace operations per Method 9. If a certified visible emissions observer is not available, qualitative observations of the visible emissions shall be made, and the existence of any visible emissions shall be considered to be over 20%.

Particulate emissions=(Monthly production rate)x(KYEIS emission factor)/(Hours of operation per month). This emission factor may be replaced by a number obtained by the latest test or emission factor approved by the Division.

**5. Specific Recordkeeping Requirements:**

Records shall be maintained of the quarterly production, hours of operation of the furnace. Records shall be maintained of the Method 9 opacity readings or the qualitative reading of visible emissions from the melt furnace.



**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**6. Specific Reporting Requirements:**

Any exceedance of the opacity or particulate emission limits as stated in this permit shall be reported to the Division as promptly as possible per Section F (6). Following an exceedance, the company shall continue to submit, for a period of at least 12 months, the monthly visible emission readings, the monthly production rates, and the hours of operation within 30 days of the end of each calendar month.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****04 (E-10)**

**Description:** One natural gas delacquered furnace, with a heat input capacity of 14 MMBTU/hr. The maximum annual output of delacquered scrap is 65,700 tons per year. This emission point is equipped with a Duralloy baghouse with lime injection and a 97% control efficiency for particulate matter.

Construction commenced: May 13, 1998

**APPLICABLE REGULATIONS:**

Regulation 401 KAR 59:010, New process operations.

**1. Operating Limitations:**

None

**2. Emission Limitations:**

Visible emissions shall not equal or exceed 20% opacity. The opacity shall be determined by Reference Method 9 of Appendix A to 40 CFR 60, filed by reference in 401 KAR 59:010.

Particulate emissions shall not exceed the limitations calculated from the equation found in 401 KAR 59:010, Appendix A.

$$E = 3.59 * P^{0.62}$$

where E is the rate of emission in lbs/ hr and P is the process weight in tons / hr.

**3. Testing Requirements:**

None

**4. Monitoring Requirements:**

Opacity readings shall be performed by a certified visible emissions observer at least once per month during furnace operations per Method 9. If a certified visible emissions observer is not available, qualitative observations of the visible emissions shall be made, and the existence of any visible emissions shall be considered to be over 20%.

Particulate emissions=(Monthly production rate)x(KYEIS emission factor)/(Hours of operation per month). This emission factor may be replaced by a number obtained by the latest test or emission factor approved by the Division.

**5. Specific Recordkeeping Requirements:**

Records shall be maintained of the quarterly production, hours of operation of the furnaces  
Records shall be maintained of the Method 9 opacity readings or the qualitative reading of visible emissions from the melt furnace.

**6. Specific Reporting Requirements:**

Any exceedance of the opacity or particulate emission limits as stated in this permit shall be reported to the Division as promptly as possible per Section F (6). Following an exceedance,

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**6. Specific Reporting Requirements:(continued)**

the company shall continue to submit, for a period of at least 12 months, the monthly visible emission readings, the monthly production rates, and the hours of operation within 30 days of the end of each calendar month.

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**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****05 (E-11)**

**Description:** Used Beverage Can (UBC) shredder. The shredder is a Universal 130/150 Impact Master II R.C. Operating schedule for the shredder is 24 hr/day, 7 days/week, and 52 weeks/yr. Maximum rated capacity is 10 ton of UBCs per hour. The shredder is electrically driven. Emission point #4 is equipped with a baghouse filter with a control efficiency of 97%. Construction commenced: 1990.

**APPLICABLE REGULATION:**

401 KAR 59:010, New process operations.

**1. Operating Limitations:**

None

**2. Emission Limitations:**

Particulate emissions shall not exceed the limitations calculated from the equation found in 401 KAR 59:010, Appendix A:  $E = 3.59 * P^{0.62}$ , where E is the rate of emission in lb / hr and P is the process weight in tons / hr.

Visible emissions shall not equal or exceed 20% opacity. The opacity shall be determined by Reference Method 9 of Appendix A to 40 CFR 60, filed by reference in 401 KAR 59:010.

**3. Testing Requirements:**

Pursuant to Regulation 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in Regulation 401 KAR 50:015 shall be conducted as required by the Division.

**4. Specific Monitoring Requirements:**

IMCO Recycling, Inc. shall monitor the following [401 KAR 50:035, Section 7(1)(c)2]:

Throughput of UBCs to the shredder;

Visible emissions on a daily basis using EPA Reference Method 9.

Particulate emissions=(Monthly production rate)x(KYEIS emission factor)/(Hours of operation per month)x(100%-baghouse control efficiency). This emission factor may be replaced by a number obtained by the latest test approved by the Division.

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**5. Specific Recordkeeping Requirements:**

Retain records of the following [401 KAR 50:035, Section 7(1)(d)2]:

UBCs throughput in the shredder;

Opacity;

Operating hours.

**6. Specific Reporting Requirements:**

Any exceedance of the opacity or particulate emission limits as stated in this permit shall be reported to the Division as promptly as possible per Section F (6). Following an exceedance the company shall continue to submit, for a period of at least 12 months, the monthly visible emission readings, the monthly production rates and the hours of operation within 30 days of the end of each calendar month.

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****06 (E-13)**

**Description:** Salt cake processing plant consisting of screens and crushers produced by various manufacturers. The processing plant operates 24 hr/day, 7 days a week, and 52 weeks per year. The equipment is electrically driven. The salt cake processing plant is equipped with a baghouse filter with a control efficiency of 97%.

Construction commenced: 1995.

**APPLICABLE REGULATION:**

401 KAR 59:010, New process operations.

**1. Operating Limitations:**

None

**2. Emission Limitations:**

a. Particulate emissions shall not exceed the limitations calculated from the equation found in 401 KAR 59:010, Appendix A:  $E=3.59 \cdot P^{0.62}$ , where E is the rate of emission in lb / hr and P is the process weight in tons / hr.

b. Visible emissions shall not equal or exceed 20% opacity. The opacity shall be determined by Reference Method 9 of Appendix A to 40 CFR 60, filed by reference in 401 KAR 59:010.

**3. Testing Requirements:**

Pursuant to Regulation 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in Regulation 401 KAR 50:015 shall be conducted as required by the Division.

**4. Specific Monitoring Requirements:**

IMCO Recycling, Inc. shall monitor the following [401 KAR 50:035, Section 7(1)(c)2]:  
Throughput of salt cakes to the processing plant;  
Visible emissions on a monthly basis using EPA Reference Method 9.

Particulate emissions=(Monthly production rate)x(KYEIS emission factor)/(Hours of operation per month)x(100%-baghouse control efficiency). This emission factor may be replaced by a number obtained by the latest test approved by the Division.

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**5. Specific Recordkeeping Requirements:**

Retain the records of the following [401 KAR 50:035, Section 7(1)(d)2]:

Salt cake throughput in the salt cake processing plant;

Operating hours.

**6. Specific Reporting Requirements:**

Any exceedance of the opacity or particulate emission limits as stated in this permit shall be reported to the Division as promptly as possible per Section F (6). Following an exceedance the company shall continue to submit, for a period of at least 12 months, the monthly visible emission readings, the monthly production rates and the hours of operation within 30 days of the end of each calendar month.

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**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****07 (E-12)**

**Description:** Salt cake cooling. The salt cake is delivered and cooled 24 hr/day, 7 days a week, and 52 weeks per year. The equipment is electrically driven. The salt cake cooling building is equipped with a baghouse filter with a control efficiency of 97%.

Construction commenced: 1995.

**APPLICABLE REGULATION:**

401 KAR 59:010, New process operations.

**1. Operating Limitations:**

None

**2. Emission Limitations:**

- a. Particulate emissions shall not exceed the limitations calculated from the equation found in 401 KAR 59:010, Appendix A:  $E=3.59 \times P^{0.62}$ , where E is the rate of emission in lb / hr and P is the process weight in tons / hr.
- b. Visible emissions shall not equal or exceed 20% opacity. The opacity shall be determined by Reference Method 9 of Appendix A to 40 CFR 60, filed by reference in 401 KAR 59:010.

**3. Testing Requirements:**

Pursuant to Regulation 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in Regulation 401 KAR 50:015 shall be conducted as required by the Division.

**4. Specific Monitoring Requirements:**

IMCO Recycling, Inc. shall monitor the following [401 KAR 50:035, Section 7(1)(c)2]:  
Throughput of salt cakes to the processing plant;  
Visible emissions on a monthly basis using EPA Reference Method 9.

Particulate emissions=(Monthly production rate)x(KYEIS emission factor)/(Hours of operation per month)x(100%-baghouse control efficiency). This emission factor may be replaced by a number obtained by the latest test approved by the Division.



**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**5. Specific Recordkeeping Requirements:**

Retain records of the following [401 KAR 50:035, Section 7(1)(d)2]:

Salt cake throughput in the salt cake processing plant;

Operating hours.

**6. Specific Reporting Requirements:**

Any exceedance of the opacity or particulate emission limits as stated in this permit shall be reported to the Division as promptly as possible per Section F (6). Following an exceedance the company shall continue to submit, for a period of at least 12 months, the monthly visible emission readings, the monthly production rates and the hours of operation within 30 days of the end of each calendar month.

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**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****08 (E-9)**

**Description:** One natural gas-fired reverberatory furnaces, with a heat input capacity of 19 MM BTU/hr. The maximum annual output of molten aluminum is 54,750 tons per year. This emission point is equipped with a lime-injected Duralloy baghouse, which is 97% control efficiency for particulate matter.

Construction commenced: May 13, 1998

**APPLICABLE REGULATIONS:**

40 CFR part 63, Subpart RRR-National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production

**1. Operating Limitations:**

The permittee shall initiate corrective action within 1-hour of a bag leak detection system alarm and complete the corrective action procedures in accordance with the operation, maintenance, and monitoring plan.

The permittee shall operate each fabric filter system such that the bag leak detection system does not sound more than 5 percent of the operating time during a 6-month block reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, each alarm shall be counted as a minimum of one hour. If the owner or operator takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.

If a continuous opacity monitoring system is used to meet the monitoring requirements in 40 CFR 63.1510, the owner or operator shall initiate corrective action within 1-hour of any 6-minute average reading of 5 percent or more opacity and complete the corrective action procedures in accordance with the operation, maintenance, and monitoring plan.

The permittee shall maintain the 3-hour block average inlet temperature for each fabric filter at or below the average temperature established during the performance test, plus 14°C (25°F); [40 CFR 63.1506 (g)(4)]

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS****1. Operating Limitations: (continued)**

The permittee shall maintain free-flowing lime in the hopper to the feed device at all times; and [40 CFR 63.1506 (g)(5)]

- (a) maintain the lime feeder setting at the same level established during the performance test [40 CFR 63.1506 (g)(5)(i)]; or
- (b) maintain the 3-hour block average lime injection rate (lbs/hr) at or above the average rate established during the performance test. The permittee shall maintain the same schedule of lime injection used in the performance test [40 CFR 63.1506 (g)(5)(ii)]; or
- (c) maintain the average lime injection rate for each operating cycle or time period used in the performance test (lb/ton feed) at or above the rate established during the performance test. The permittee shall maintain the same schedule of lime injection used in the performance test [40 CFR 63.1506 (g)(5)(iii)].

The permittee shall maintain the total reactive chlorine flux injection rate for each operating cycle or time period used in the performance test at or below the average rate established during the performance test. The permittee shall use the same flux injection schedule used in the performance test.

The permittee shall operate each side-well furnace such that:

- (a) the level of molten metal remains above the top of the passage between the side-well and hearth during reactive fluxing
- (b) the reactive flux is added only in the sidewell unless the hearth is also equipped with a control device for PM, HCl, and D/F emissions.

**2. Emission Limitations:**

The permittee shall not discharge to the atmosphere or cause to be discharged to the atmosphere any emissions in excess of:

- (a) 0.40 lb of PM per ton of feed from the group1 furnace at the Morgantown secondary aluminum facility which is a major source;
- (b)  $2.1 \times 10^{-4}$  gr of D/F TEQ per ton of feed from the group 1 furnace;
- (c) 0.40 lb of HCl per ton of feed or, reduce uncontrolled HCl emissions by at least 90 percent, by weight.

**3. Testing Requirements:**

The permittee shall conduct performance tests to measure emissions of PM and D/F at the outlet of the control device, and emissions of HCl at the outlet (for the emission limit) or the inlet and the outlet (for percent reduction standard) within 180 days of issuance of this permit.

## **SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS**

**4. Specific Monitoring Requirements:**

The permittee shall monitor the following [401 KAR 50:035, Section 7(1)(c)2]:

Labeling;  
Emission capture and collection system;  
Charge/feed weight;  
Opacity;  
Chlorine injection rate;  
Feed material;  
Bag leak detector;  
Lime injection rate and schedule;  
Fabric filter inlet temperature.

**5. Specific Recordkeeping Requirements:**

The permittee shall maintain records of:

Labeling;  
Emission capture and collection system;  
Charge/feed weight;  
Opacity;  
Chlorine injection rate;  
Feed material;  
Bag leak detector;  
Lime injection rate and schedule;  
Fabric filter inlet temperature.

**6. Specific Reporting Requirements:**

Each report shall include the following certification:

"The group 1 furnace was operated such that the level of molten metal remained above the top of the passage between the side well and hearth during reactive fluxing and reactive flux was added only to the sidewell or to a furnace hearth equipped with an add-on air pollution control device for PM, HCl, and D/F emissions during this reporting period."

**7. Specific Control Equipment Operating Conditions:**

Maintain free flowing lime in the feed hopper or silo by inspection every eight (8) hours with documentation. Maintain the same or higher lime injection rate used during the compliance stack test. Record this rate in 15 minute block averages, calculate 3 hour block averages using a weight measuring device and documenting the lbs/hr or lbs/ton aluminum.

## **SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **GROUP Requirements**

#### **Emission Points:**

##### **09 (FE)**

**Description:** Crucible heaters manufactured by North American (4922-7-A). Rated burner capacity is 1.04 MMBTU/hr/heater of natural gas. Maximum operating schedule is 6.57 hours per year. Construction commenced: 1991.

##### **10 (FE)**

**Description:** On-Site landfill for the disposal of process waste. Contains salt cakes which generate fugitive ammonia emissions when salt cake and baghouse dust are wet. Construction commenced: 1990.

##### **11 (FE)**

**Description:** Storage bins for handling raw materials (i.e. aluminum scrap). Construction commenced: 1989.

##### **12 (FE)**

**Description:** Haul roads for the transportation of salt cake between salt cake processing plant and the landfill.

#### **APPLICABLE REGULATION:**

401 KAR 63:010, Fugitive Emissions

##### **1. Operating Limitations:**

None

##### **2. Emission Limitations:**

In accordance to 401 KAR 63:010, Section 3, (2), visible fugitive dust emissions shall not be discharged beyond the lot line of the property.

##### **3. Testing Requirements:**

None

##### **4. Specific Monitoring Requirements:**

None

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**5. Specific Record keeping Requirements:**

None

**6. Specific Reporting Requirements:**

None

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## SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to Regulation 401 KAR 50:035, Section 5(4).

	<b>Description</b>	<b>Regulation</b>
1.	Salt Cake Reject Storage Building	401 KAR 59:010
2.	Above Ground Storage Tanks, Refueling (On and Off Road Diesel, Unleaded Gasoline)	401 KAR 50:035, Section 5 (4)

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## **SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS**

Not Applicable

## **SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS**

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.



**SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS**

1. When continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
  - a. Date, place as defined in this permit, and time of sampling or measurements.
  - b. Analyses performance dates;
  - c. Company or entity that performed analyses;
  - d. Analytical techniques or methods used;
  - e. Analyses results; and
  - f. Operating conditions during time of sampling or measurement;
2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality. [401 KAR 50:035, Permits, Section 7(1)(d)2 and 401 KAR 50:035, Permits, Section 7(2)(c)]
3. In accordance with the requirements of Regulation 401 KAR 50:035, Permits, Section 7(2)(c) the permittee shall allow the Cabinet or authorized representatives to perform the following:
  - a. Enter upon the premises where a source is located or emissions-related activity is conducted, or where records are kept;
  - b. Have access to and copy, at reasonable times, any records required by the permit:
    - i. During normal office hours, and
    - ii. During periods of emergency when prompt access to records is essential to proper assessment by the Cabinet;
  - c. Inspect, at reasonable times, any facilities, equipment (including monitoring and pollution control equipment), practices, or operations required by the permit. Reasonable times shall include, but are not limited to the following:
    - i. During all hours of operation at the source,
    - ii. For all sources operated intermittently, during all hours of operation at the source and the hours between 8:00 a.m. and 4:30 p.m., Monday through Friday, excluding holidays, and
    - iii. During an emergency; and
  - d. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements. Reasonable times shall include, but are not limited to the following:
    - i. During all hours of operation at the source,
    - ii. For all sources operated intermittently, during all hours of operation at the source and the hours between 8:00 a.m. and 4:30 p.m., Monday through Friday, excluding holidays, and
    - iii. During an emergency.
4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

**SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (CONTINUED)**

5. Reports of any monitoring required by this permit shall be reported to the division's Bowling Green Regional Office no later than the six-month anniversary date of this permit and every six months thereafter during the life of this permit, unless otherwise stated in this permit. The permittee may shift to semi-annual reporting on a calendar year basis upon approval of the regional office. If calendar year reporting is approved, the semi-annual reports are due January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to Section 6(1) of Regulation 401 KAR 50:035, Permits. All deviations from permit requirements shall be clearly identified in the reports.
6.
  - a. In accordance with the provisions of Regulation 401 KAR 50:055, Section 1 the owner or operator shall notify the Division for Air Quality's Bowling Green Regional Office concerning startups, shutdowns, or malfunctions as follows:
    1. When emissions during any planned shutdowns and ensuing startups will exceed the standards notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
    2. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards notification shall be made as promptly as possible by telephone (or other electronic media) and shall cause written notice upon request.
  - b. In accordance with the provisions of Regulation 401 KAR 50:035, Section 7(1)(e)2, the owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by general condition 6 a. above) to the Division for Air Quality's Bowling Green Regional Office within 30 days. Other deviations from permit requirements shall be included in the semiannual report required by general condition F.5.
7. Pursuant to Regulation 401 KAR 50:035, Permits, Section 7(2)(b), the permittee shall certify compliance with the terms and conditions contained in this permit, annually on the permit issuance anniversary date or by January 30th of each year if calendar year reporting is approved by the regional office, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an approved alternative) to the Division for Air Quality's Bowling Green Regional Office and the U.S. EPA in accordance with the following requirements:
  - a. Identification of each term or condition of the permit that is the basis of the certification;
  - b. The compliance status regarding each term or condition of the permit;
  - c. Whether compliance was continuous or intermittent; and
  - d. The method used for determining the compliance status for the source, currently and over the reporting period, pursuant to 401 KAR 50:035, Section 7(1)(c),(d), and (e).

## **SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (CONTINUED)**

- e. The certification shall be postmarked by the thirtieth (30) day following the applicable permit issuance anniversary date, or by January 30th of each year if calendar year reporting is approved by the regional office. Annual compliance certifications should be mailed to the following addresses:

Division for Air Quality  
Bowling Green Regional Office  
1508 Westen Avenue  
Bowling Green, KY 42104

U.S. EPA Region IV  
Air Enforcement Branch  
Atlanta Federal Center  
61 Forsyth St.  
Atlanta, GA 30303-8960

Division for Air Quality  
Central Files  
803 Schenkel Lane  
Frankfort, KY 40601

8. In accordance with Regulation 401 KAR 50:035, Section 23, the permittee shall provide the division with all information necessary to determine its subject emissions within thirty (30) days of the date the KEIS emission report is mailed to the permittee.
9. Pursuant to Section VII.3 of the policy manual of the Division for Air Quality as referenced by Regulation 401 KAR 50:016, Section 1(1), results of performance test(s) required by the permit shall be submitted to the division by the source or its representative within forty-five days after the completion of the fieldwork.

## SECTION G - GENERAL CONDITIONS

### (a) General Compliance Requirements

1. The permittee shall comply with all conditions of this permit. A noncompliance shall be (a) violation(s) of state regulation 401 KAR 50:035, Permits, Section 7(3)(d) and is also a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) and is grounds for enforcement action including but not limited to the termination, revocation and reissuance, or revision of this permit.
2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition.
3. This permit may be revised, revoked, reopened and reissued, or terminated for cause. The permit will be reopened for cause and revised accordingly under the following circumstances:
  - a. If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to Regulation 401 KAR 50:035, Section 12(2)(c);
  - b. The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
  - c. The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the division may provide a shorter time period in the case of an emergency.
4. The permittee shall furnish to the division, in writing, information that the division may request to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. [401 KAR 50:035, Permits, Section 7(2)(b)3e and 401 KAR 50:035, Permits, Section 7(3)(j)]
5. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority.

## SECTION G - GENERAL CONDITIONS (CONTINUED)

6. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit. [401 KAR 50:035, Permits, Section 7(3)(k)]
7. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance. [401 KAR 50:035, Permits, Section 7(3)(e)]
8. Except as identified as state-origin requirements in this permit, all terms and conditions contained herein shall be enforceable by the United States Environmental Protection Agency and citizens of the United States.
9. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6). [401 KAR 50:035, Permits, Section 7(3)(h)]
10. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance. [401 KAR 50:035, Permits, Section 8(3)(b)]
11. This permit shall not convey property rights or exclusive privileges. [401 KAR 50:035, Permits, Section 7 (3)(g)]
12. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Natural Resources and Environmental Protection or any other federal, state, or local agency.
13. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry. [401 KAR 50:035, Permits, Section 7(2)(b)5]
14. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders. [401 KAR 50:035, Permits, Section 8(3)(a)]
15. Permit Shield: Except as provided in State Regulation 401 KAR 50:035, Permits, compliance by the affected facilities listed herein with the conditions of this permit shall be deemed to be compliance with all applicable requirements identified in this permit as of the date of issuance of this permit.
16. All previously issued construction and operating permits are hereby subsumed into this permit.

**SECTION G - GENERAL CONDITIONS (CONTINUED)****(b) Permit Expiration and Reapplication Requirements**

This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the division. [401 KAR 50:035, Permits, Section 12]

**(c) Permit Revisions**

1. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of Regulation 401 KAR 50:035, Section 15.
2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority thirty (30) days in advance of the transfer.

**(d) Construction, Start-Up, and Initial Compliance Demonstration Requirements**  
**Emission point 08 (E-9)**

1. Construction of process and/or air pollution control equipment authorized by this permit shall be conducted and completed only in compliance with the conditions of this permit.
2. Within thirty (30) days following commencement of construction, and within fifteen (15) days following start-up, and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the issuance date of this permit, whichever is later, the permittee shall furnish to the Division for Air Quality's Bowling Green Regional Office in writing, with a copy to the division's Frankfort Central Office, notification of the following:
  - a. The date when construction commenced.
  - b. The date of start-up of the affected facilities listed in this permit.
  - c. The date when the maximum production rate specified in the permit application was achieved.

**SECTION G - GENERAL CONDITIONS (CONTINUED)**

3. Pursuant to State Regulation 401 KAR 50:035, Permits, Section 13(1), unless construction is commenced on or before 18 months after the date of issue of this permit, or if construction is commenced and then stopped for any consecutive period of 18 months or more, or if construction is not completed within eighteen (18) months of the scheduled completion date, then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Extensions of the time periods specified herein may be granted by the division upon a satisfactory request showing that an extension is justified.
4. Operation of the affected facilities for which construction is authorized by this permit shall not commence until compliance with the applicable standards specified herein has been demonstrated pursuant to 401 KAR 50:055, except as provided in Section I of this permit.
5. This permit shall allow time for the initial start-up, operation, and compliance demonstration of the affected facilities listed herein. However, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance demonstration test on the affected facilities in accordance with Regulation 401 KAR 50:055, General compliance requirements. These performance tests must also be conducted in accordance with General Conditions G(d)6 of this permit and the permittee must furnish to the Division for Air Quality's Frankfort Central Office a written report of the results of such performance test.
6. Pursuant to Section VII 2.(1) of the policy manual of the Division for Air Quality as referenced by Regulation 401 KAR 50:016, Section 1.(1), at least one month prior to the date of the required performance test, the permittee shall complete and return a Compliance Test Protocol (Form DEP 6027) to the division's Frankfort Central Office. Pursuant to 401 KAR 50:045, Section 5, the division shall be notified of the actual test date at least ten (10) days prior to the test.

(e) Acid Rain Program Requirements

If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

(f) Emergency Provisions

1. An emergency shall constitute an affirmative defense to an action brought for noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or other relevant evidence that:

**SECTION G - GENERAL CONDITIONS (CONTINUED)**

- a. An emergency occurred and the permittee can identify the cause of the emergency;
  - b. The permitted facility was at the time being properly operated;
  - c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and,
  - d. The permittee notified the division as promptly as possible and submitted written notice of the emergency to the division within two working days after the time when emission limitations were exceeded due to the emergency. The notice shall meet the requirements of 401 KAR 50:035, Permits, Section 7(1)(e)2, and include a description of the emergency, steps taken to mitigate emissions, and the corrective actions taken. This requirement does not relieve the source of any other local, state or federal notification requirements.
2. Emergency conditions listed in General Condition (f)1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement.
  3. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof. [401 KAR 50:035, Permits, Section 9(3)]

(g) Risk Management Provisions

1. The permittee shall comply with all applicable requirements of 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:  
RMP Reporting Center  
P.O. Box 3346  
Merrifield, VA, 22116-3346
2. If requested, submit additional relevant information by the division or the U.S. EPA.

(h) Ozone depleting substances

1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
  - a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
  - b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
  - c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
  - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166.



**SECTION G - GENERAL CONDITIONS (CONTINUED)**

- e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
  - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

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## **SECTION H - ALTERNATE OPERATING SCENARIOS**

Not Applicable

## **SECTION I - COMPLIANCE SCHEDULE**

Compliance with 40 CFR 63, Subpart RRR for existing affected sources and emission units is required by March 24, 2003. The permittee shall submit a complete permit application by September 1, 2001. The permittee shall demonstrate how compliance with Subpart RRR is to be achieved for the existing affected sources and emission units.

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